

Math Snacks: Monster School Bus

Monster School Bus is a game that allows students to visualize grouping, specifically in groups of ten, with whole numbers and decimals.

You are the bus driver and you decide whom to pick up, and when. Get as many full loads as you can while you earn prizes and watch buildings transform all around you. By playing Monster School Bus and engaging in at least one of the recommended bonus activities, students will learn to find groups of numbers that equal 10 or 1, and to recognize that there are multiple ways to group numbers.

Note that, depending on your internet connection speed, the game might take a minute or more to load:



How to Play

Your goal is to deliver as many full busloads of students to the school as you can.

On the Title screen, click, "New Game."



Mouse over one of the two avatars from the "Character Select" screen, choose that avatar, then click to continue.



You'll be taken through a series of screens describing the background story.



Click the right-facing arrow icon in the lower right corner to move forward:









Practice using the keyboard arrow keys to pick up the first group of five green students:





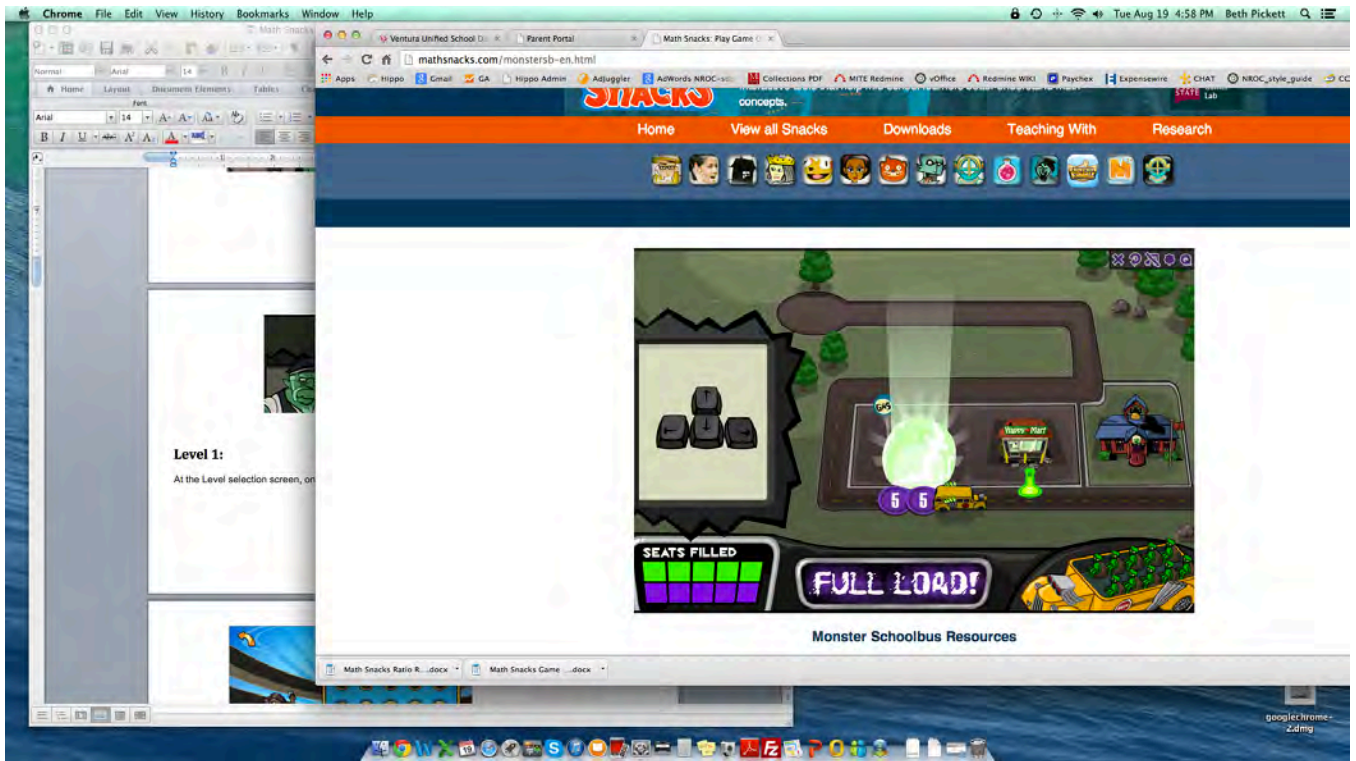


Use the arrow keys to move the bus around the corners to the next bus stop.



Note the two flasks of green potion now shown on the map (in the shaded background here):





Try to smash as many green flasks as possible before they disappear!

Use the arrow keys to move the bus forward, past the school.



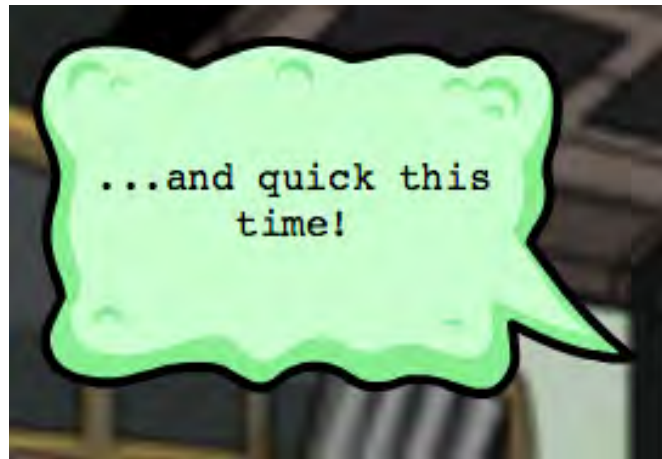


Level 1:

At the Level selection screen, click on “DAY 1.”











The first students are aliens, and you are told that 10 can fit on a bus. They count as one each.



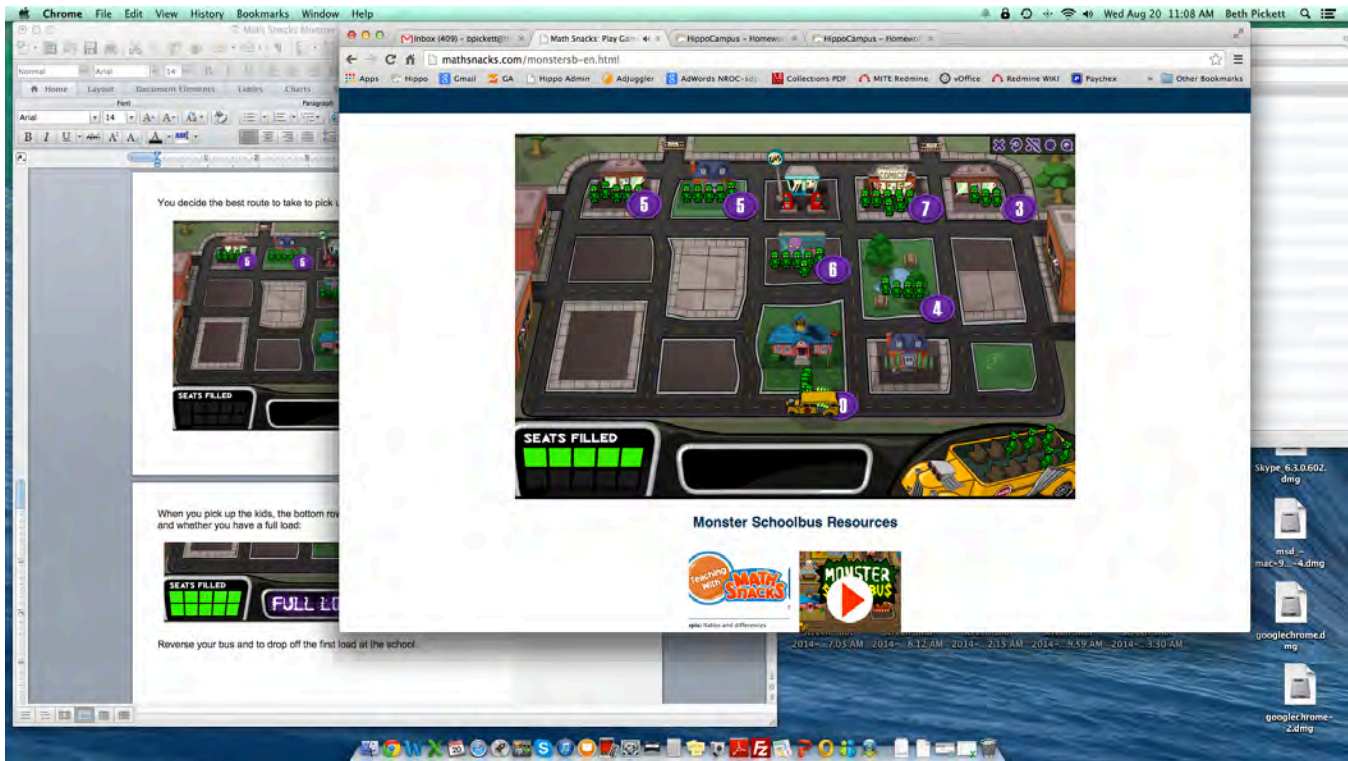
You decide the best route to take to pick up 10 alien kids.



When you pick up the kids, the bottom of the screen will show how many seats are filled and whether you have a full load:



Reverse your bus and to drop off the first load at the school. As the students offload, the data on the bottom of the screen will update to show an empty bus again.



Continue on your route to pick up more sets of 10 students. When you see flasks of magic potion appear on the map, try to run over them with the bus before they disappear! Running over a flask gives you a “Rocked-Out building.”

At the end of the level, you'll get a report card that shows how you are doing:



Level 2:

At the Level selection screen, click on “DAY 2.”



You'll finish the level when all the kids are picked up and delivered to the school:



Level 3:

At the Level selection screen, click on “DAY 3.”



Watch out! Any time you drive past the school, the students will get off even if the bus is not full.



A few hints on game strategy:

-- Don't use up all of your small numbers by pairing them with other small numbers to fill the first bus. For example, while you can fill the bus by using a bunch of 4s and 2s to make 10, when you go back out for the second, third, and fourth loads, all you will have left on the screen is larger numbers and it will be harder to fill the bus to exactly 10.

-- There are no extra points for speed, so have students review the map and take their time deciding which combinations of loads they'll want to get prior to starting the game.

Level 4:

At the Level selection screen, click on “DAY 1” from “Carnie Town.”



But in Carnie Town, things are different:

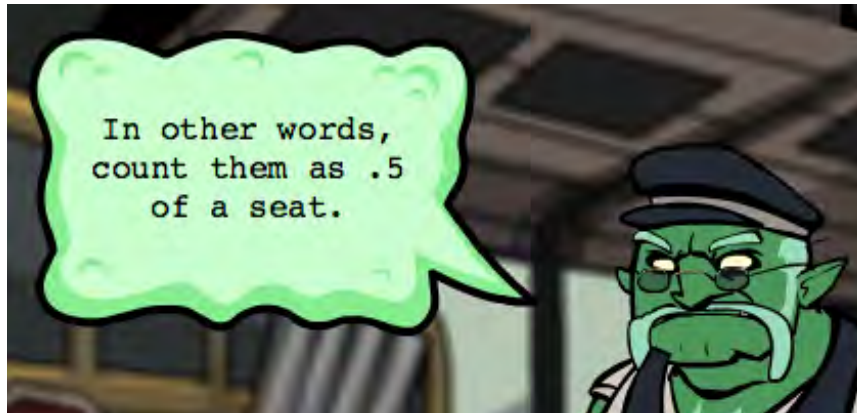


...so they're
half the size of
regular kids.



Now, these kids
are half as big,
so you can fit
two to a seat.







Additional Levels:

In Yellow Bone, the kids get bigger, not smaller:

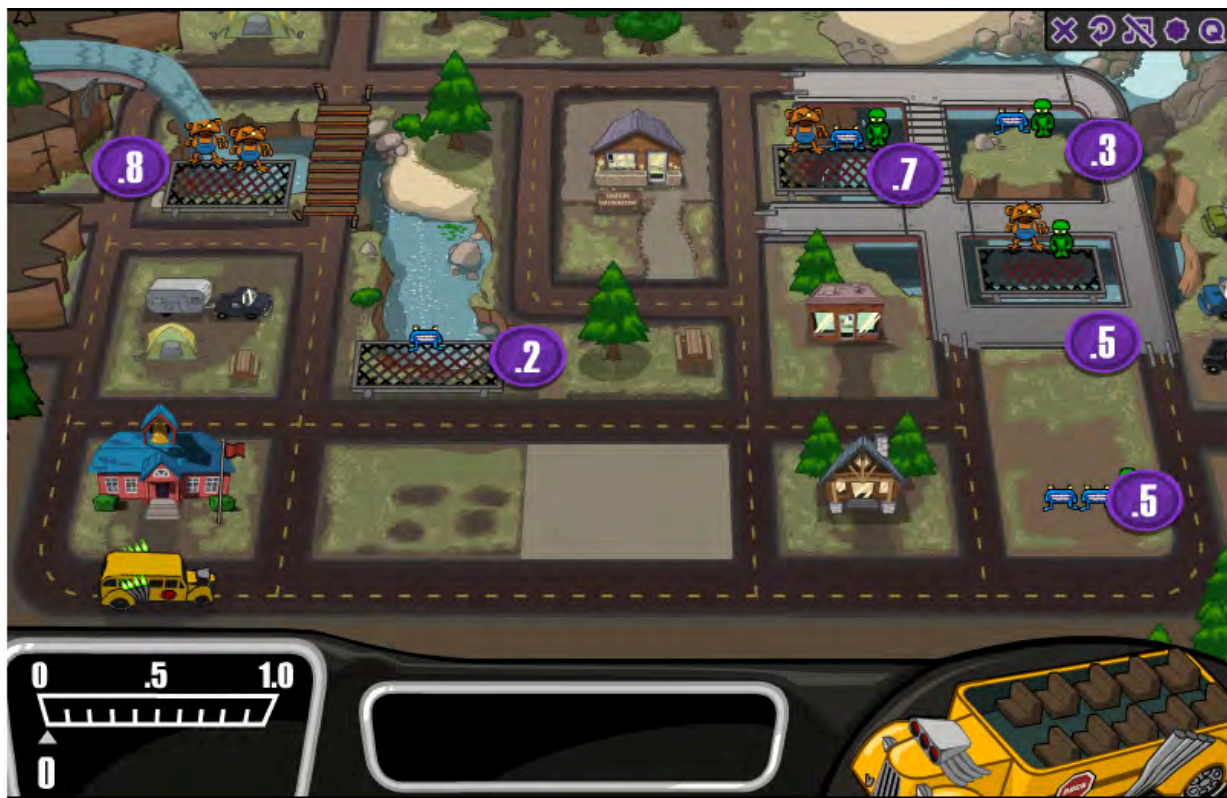


You must use decimals to fill the bus with “Mouthers” that take up two seats and



“Biggies” that take up four seats:

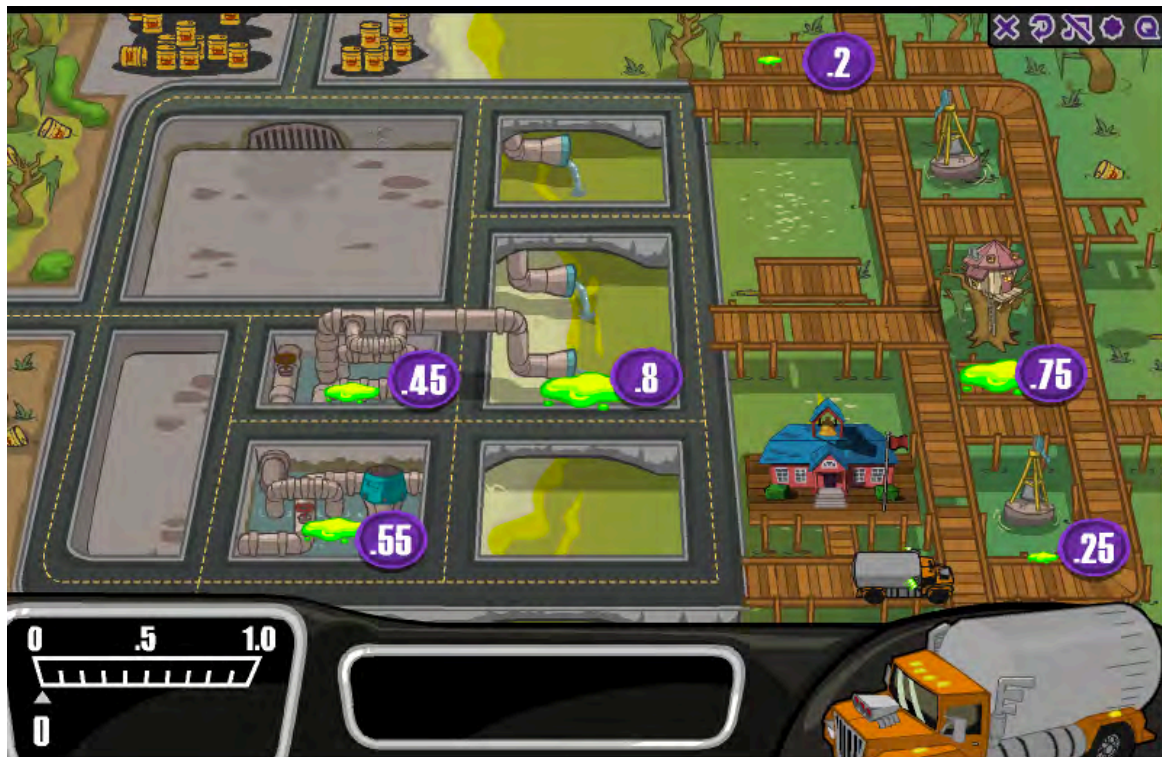




At the “Slimesburg” level, the kids are gelatinous and come in all volumnes, and the bus becomes a tank that needs filling:



And decimal places go to the hundredths:



The final level gives students lots of double-digit decimals to work with:



More information to help you teach with Monster School Bus:

Monster School Bus Teacher Guide (PDF):

http://mathsnacks.com/media/print/MonsterSchoolbus_teachingwith.pdf

Monster School Bus and the Common Core Standards:

<http://mathsnacks.com/monster-school-bus-en.html#adcommoncore>

General Guidelines for Teaching with Math Snacks Games:

http://mathsnacks.com/teaching_edappr.html#games